IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Previously Presented) A method of assembling an optical module including a light emitting element and at least one optical component, the method comprising the steps of:

measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive with unrestricted divergence said light emitted from said light-emitting element; and

positioning said at least one optical component based on said FFP.

Claim 2. (Currently Amended) The ~~A~~ method of claim 1, further comprising the steps of: ~~assembling an optical module including a light emitting element and at least one optical component, the method comprising the steps of:~~

~~measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light-emitting element;~~

~~positioning said at least one optical component based on said FFP;~~

measuring an outgoing angle of said light emitted from a light-emitting element; and

orienting said light-emitting element based on said outgoing angle.

Claim 3. (Currently Amended) The ~~A~~ method of claim 1 ~~assembling an optical module including a light emitting element and at least one optical component, the method comprising the steps of:~~

~~measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light emitting element; and~~

~~positioning said at least one optical component based on said FFP~~,

wherein the step of measuring the FFP comprises measuring a divergent angle of said light output from said ~~light emitting element~~ at least one optical component.

Claim 4. (Previously Presented) The method of claim 3, wherein the step of positioning said at least one optical component is based on said divergent angle.

Claim 5. (Previously Presented) The method of claim 1, further comprising the step of fixing the position of said at least one optical component after said positioning step.

Claim 6. (Original) The method of claim 5, wherein the step of fixing comprises welding said at least one optical component with a laser.

Claim 7. (Previously Presented) The method of claim 1, wherein: the step of measuring the FFP of the light output from said at least one optical component comprises measuring the FFP of the light output from a collimating lens configured to collimate the

light emitted from said light-emitting element; and the step of positioning comprises positioning said collimating lens.

Claim 8. (Previously Presented) The method of claim 7, wherein: the step of measuring the FFP of the light output from said at least one optical component comprises measuring the FFP of the light output from a focusing lens configured to focus a collimated light output from said collimating lens; and the step of positioning comprises positioning said focusing lens.

Claim 9. (Previously Presented) A method of assembling an optical module including a light emitting element and at least one optical component, the method comprising the steps of:

measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light-emitting element;

positioning said at least one optical component based on said FFP; and

measuring a near field pattern (NFP) of the light output from said at least one optical component; and positioning said at least one optical component based on said NFP, wherein the step of positioning based on said NFP is performed before the step of positioning based on said FFP.

Claims 10-17. (Canceled)

Claim 18. (Previously Presented) A system for assembling an optical module including a light emitting element and at least one optical component, the system comprising: means for measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive with unrestricted divergence said light emitted from said light-emitting element; and means for positioning said at least one optical component based on said FFP.

Claim 19. (Currently Amended) The ~~A~~ system of claim 18, further comprising: ~~for assembling an optical module including a light emitting element and at least one optical component, the system comprising:~~

~~means for measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light-emitting element;~~

~~means for positioning said at least one optical component based on said FFP;~~

means for measuring an outgoing angle of said light emitted from said light-emitting element; and

means for orienting said light-emitting element based on said outgoing angle.

Claim 20. (Currently Amended) The ~~A~~ system of claim 18, ~~for assembling an optical module including a light emitting element and at least one optical component, the system comprising: means for measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light-~~

~~emitting element; and means for positioning said at least one optical component based on said FFP,~~ wherein the means for measuring the FFP comprises means for measuring ~~at least one of~~ a divergent angle of said light output from said ~~light emitting element~~ at least one optical component.

Claim 21. (Previously Presented) The system of claim 20, wherein the means for positioning is configured to position said at least one optical component based on said divergent angle.

Claim 22. (Previously Presented) The system of claim 18, further comprising means for fixing the position of said at least one optical component.

Claim 23. (Original) The system of claim 22, wherein the means for fixing comprises a means for welding said at least one optical component.

Claim 24. (Previously Presented) The system of claim 18, wherein said at least one optical component comprises means for collimating the light emitted from said light-emitting element.

Claim 25. (Original) The system of claim 24, wherein said at least one optical component comprises means for focusing a collimated light output from said means for collimating.

Claim 26. (Previously Presented) A system for assembling an optical module including a light emitting element and at least one optical component, the system comprising:

means for measuring a far field pattern (FFP) of a light output from said at least one optical component, which is configured to receive said light emitted from said light-emitting element;

means for positioning said at least one optical component based on said FFP;

means for measuring a near field pattern (NFP) of the light output from said at least one optical component; and

means for positioning said at least one optical component based on said NFP, wherein the means for positioning based on said NFP is configured to position said at least one optical component before the means for positioning based on said FFP positions said at least one optical component.

Claims 27-34. (Canceled)

Claim 35. (Currently Amended) A system for assembling an optical module, the system comprising: a light-emitting element; at least one optical component configured to receive with unrestricted divergence a light emitted from said light emitting element, a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component; and a holding mechanism configured to position said at least one optical component based on said FFP~~, wherein the FFP optical~~

~~measurement system is configured to measure a divergent angle of said light output from said light emitting element~~.

Claim 36. (Currently Amended) The ~~A~~ system of claim 35, further comprising: ~~for assembling an optical module, the system comprising:~~

~~a light emitting element;~~

~~at least one optical component configured to receive a light emitted from said light emitting element;~~

~~a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component;~~

~~a holding mechanism configured to position said at least one optical component based on said FFP; and~~

a stage configured to orient said light emitting element,

wherein the FFP optical measurement system is configured to measure an outgoing angle of said light emitted from said light emitting element; and the stage is configured to orient said light emitting element based on said outgoing angle.

Claim 37. (Currently Amended) The system of claim 35, wherein the FFP optical measurement system is configured to measure at least one of a divergent angle and an axis of said light output from said at least one optical component.

Claim 38. (Original) The system of claim 37, wherein the holding mechanism is configured to position said at least one optical component based on said at least one of said divergent angle and said axis.

Claim 39. (Previously Presented) The system of claim 35, further comprising a fixing mechanism configured to fix the position of said at least one optical component.

Claim 40. (Original) The system of claim 39, wherein the fixing mechanism comprises a laser configured to weld said at least one optical component.

Claim 41. (Previously Presented) The system of claim 35, wherein said at least one optical component comprises a collimating lens configured to collimate the light emitted from said light-emitting element.

Claim 42. (Original) The system of claim 41, wherein said at least one optical component comprises a focusing lens configured to focus a collimated light output from said collimating lens.

Claim 43. (Previously Presented) A system for assembling an optical module, the system comprising:

a light-emitting element;

at least one optical component configured to receive a light emitted from said light emitting element;

a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component;

a holding mechanism configured to position said at least one optical component based on said FFP; and

a near field pattern (NFP) optical measurement system configured to measure the NFP of the light output from said at least one optical component; and wherein the holding mechanism is configured to position said at least one optical component based on said NFP before positioning said at least one optical component based on said FFP.

Claim 44. (Original) The system of claim 43, further comprising an optical distributor configured to route said light from said at least one optical component to one of said FFP optical measurement system and said NFP optical measurement system.

Claim 45. (Previously Presented) The system of claim 36, further comprising a controller configured to receive data of said outgoing angle from said FFP optical measurement system, and control said stage based on said data.

Claim 46. (Previously Presented) The system of claim 35, further comprising a controller configured to: receive FFP data from said FFP optical measurement system, and control said holding mechanism based on said FFP data.

Claim 47. (Original) The system of claim 46, further comprising a fixing mechanism configured to fix the position of said at least one optical component, and wherein the controller is further configured to control the fixing mechanism.

Claim 48. (Previously Presented) The system of claim 43, further comprising a controller configured to: receive near field pattern (NFP) data from a NFP optical measurement system, and control said holding mechanism based on said NFP data.

Claim 49. (Currently Amended) A system for assembling an optical module, the system comprising: a light-emitting element; at least one optical component configured to receive with unrestricted divergence a light emitted from said light-emitting element; a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component; and a holding mechanism configured to position said at least one optical component based only on said FFP~~, wherein the FFP optical measurement system is configured to measure a divergent angle of said light output from said light-emitting element~~.

Claim 50. (Currently Amended) The system of claim 49, wherein the FFP optical measurement system is configured to measure at least one of a divergent angle and an axis of said light output from said at least one optical component.

Claim 51. (Original) The system of claim 50, wherein the holding mechanism is configured to position said at least one optical component based on said at least one of said divergent angle and said axis.

Claim 52. (Original) The system of claim 49, further comprising a fixing mechanism configured to fix the position of said at least one optical component.

Claim 53. (Original) The system of claim 52, wherein the fixing mechanism comprises a laser configured to weld said at least one optical component.

Claim 54. (Original) The system of claim 49, wherein said at least one optical component comprises a collimating lens configured to collimate the light emitted from said light-emitting element.

Claim 55. (Original) The system of claim 54, wherein said at least one optical component comprises a focusing lens configured to focus a collimated light output from said collimating lens.

Claim 56. (Previously Presented) A system for assembling an optical module, the system comprising:

a light-emitting element;

at least one optical component configured to receive a light emitted from said light-emitting element;

a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component;

a holding mechanism configured to position said at least one optical component based only on said FFP; and

a near field pattern (NFP) optical measurement system configured to measure the NFP of the light output from said at least one optical component; and wherein the holding mechanism is configured to position said at least one optical component based on said NFP before positioning said at least one optical component based on said FFP.

Claim 57. (Original) The system of claim 56, further comprising an optical distributor configured to route said light from said at least one optical component to one of said FFP optical measurement system and said NFP optical measurement system.

Claim 58. (Original) The system of claim 49, further comprising a controller configured to: receive FFP data from said FFP optical measurement system, and control said holding mechanism based on said FFP data.

Claim 59. (Original) The system of claim 58, further comprising: a fixing mechanism configured to fix the position of said at least one optical component, and wherein the controller is further configured to control the fixing mechanism.

Claim 60. (Previously Presented) A system for assembling an optical module, the system comprising:

a light-emitting element;

at least one optical component configured to receive a light emitted from said light-emitting element;

a far field pattern (FFP) optical measurement system configured to measure an FFP of a light output from said at least one optical component;

a holding mechanism configured to position said at least one optical component based only on said FFP;

a controller configured to: receive FFP data from said FFP optical measurement system, and control said holding mechanism based on said FFP data; and

a near field pattern (NFP) optical measurement system configured to measure the NFP of the light output from said at least one optical component; wherein the controller is further configured to: receive NFP data from the NFP optical measurement system, and control said holding mechanism based on said NFP data.

Claims 61-74. (Canceled)

Claim 75. (Previously Presented) The method of claim 1, wherein the step of measuring the FFP comprises measuring an axis of said light output from said at least one optical component.

Claim 76. (Previously Presented) The method of claim 75, wherein the step of positioning said at least one optical component is based on said axis.

Claim 77. (Previously Presented) The system of claim 18, wherein the means for measuring the FFP comprises means for measuring an axis of said light output from said at least one optical component.

Claim 78. (Previously Presented) The system of claim 77, wherein the means for positioning is configured to position said at least one optical component based on said axis.